

Challenges of Provision and Utilization of Fertility Health Information Resources and Services in Medical Libraries of Teaching Hospitals in South East Nigeria

R.E. OZIOKO¹, J. C. ONYENACHI² (✉) & O.C. OKEKE³

^{1&2} Michael Okpara University of Agriculture, Umudike.

³ Enugu State University of Science and Technology, Agbani.

Abstract

The focus of this research is on teaching hospital libraries which is a form of medical library. Two research objectives cum questions and research hypotheses guided the study. Literatures on infertility, medical library and as well measures to combat infertility were all reviewed. Descriptive survey design was used for the study. A population of 4425 medical library users from the 8 teaching hospital libraries in the 5 states of South East zone of Nigeria made up the study. Whereas the census sampling technique was adopted to sample 44 medical librarians, the proportionate stratified simple random sampling was adopted to sample 885 users, resulting to a total sample of 929 respondents. Of the 44 librarians sampled, 30 responded accurately, while out of 885 users sampled, 618 responded adequately to the instrument. Analysis was made using mean scores and standard deviation. It was revealed that both the federal and state teaching hospital medical libraries have challenges facing their provision and also the utilization of reproductive resources and services. Recommendations were made based on the findings, while conclusion was adequately drawn.

Keywords

Provision, Utilization, Reproductive Resources, Reproductive Services, Teaching Hospitals, Medical Library

Corresponding Author (✉)

onyenachijoy@gmail.com

Department of Library and Information Science, Michael Okpara University of Agriculture, Umudike. PM.B. 7267 Umuahia, Abia State, Nigeria,

© Nigeria Library Association Enugu State Chapter

Introduction

Reproductive health in human entails procreation as instituted by God Himself. Not-with-standing, many definitions of reproductive health abound. Reproductive health according to the World Health Organization (WHO; 2017) is defined as a "state of physical, mental, and social well-being in all matters relating to the reproductive system. It addresses the reproductive processes, functions and system at all stages of life and implies that people are able to have a satisfying and safe sex life, and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so. Medical libraries are therefore, charged with the provision as well as control of medical information systems of which reproductive health is inclusive. Oguonu (2012) defined the medical library as one created to support

their parent institutions by meeting the needs of their medical personnel, staff and researchers seeking information about specific diseases, diagnoses, or treatments, which affect either their own health or clients. Aside medical practitioners who use the medical library, other professionals also use it particularly lawyers so as to consult materials on some forensic cases they have in court. In fact, forensic medicine and medical jurisprudence are major areas of specialization for lawyers and doctors today and they need a sound medical library for their study and research.

Ezukwuoke and Okereke (2016) stated that medical library is an information laboratory that presents one of the most important channels for new information entering into the medical institution. The duo maintained that it provides evidence to validate current scientific generalizations and the bases upon which to build new ideas. The authors

maintained that these libraries established in hospitals, health institutions and health agencies have specific purposes for their establishment. The purposes are to assist physicians, health professionals, students, patients and medical researchers in finding health and scientific information to improve, update, and access or evaluate healthcare (Ebong, 2012). No wonder some medical institutions have included medical informatics progressively into the four years of the medical school curriculum such as in the case of Erasmus University in The Netherlands.

The provision and utilization of infertility combating resources and services in medical libraries of teaching hospitals seem to be a new phenomenon that needs to be extensively researched. This is needful since the library has changed from being cultural monuments to knowledge acquisition and information communication centre (Mwatela, 2013). Information resources and services provision as well as utilization are important areas of research in librarianship that need to be extremely explored. The provision of information resources and services generally has become imperative in all libraries, hence, the five (5) laws of librarianship as propounded by Ranganathan in 1931:" **1.** Books are for use - indicating that library materials are meant to be used by information seekers; **2.** Every book, its reader: inferring that every book a reader has should satisfy his information needs at that given time; **3.** Every reader, his book - implying that particular book is indeed for that reader on the premise that it is satisfying his/her information need; **4.** Save the time of the reader- suggesting that the librarians of the libraries should not flood the library with irrelevant materials considering the type of users they serve; **5.** The library is a growing organism: Yes, the library grows not that it is a physical living organism but through the constant acquisition of materials in the library to satisfy her users. With this

postulation, it is succinct to state that, accurate and precise information materials needed by the reader should be provided whenever the need arises. Again, any assistance the user requires from the librarians should be given immediately. More so, the library is the only centralized location where new and emerging information technologies are combined with traditional knowledge resources in a user-focused, service-rich environment that supports today's social and educational patterns of learning, teaching, and research (Anunne, 2017).

Librarians who are trained to work in medical libraries are known as medical librarians. They plan, select, acquire, organize, maintain and disseminate information materials that are relevant to the organizations' day to day activities. The librarians of medical libraries are said to be specialists since they have core knowledge of the information needs of their parent body. Librarians are indispensable to the clinicians' continuing education because making information accessible and responding to information requests to meet their need cannot be relegated. Healthcare and supporting services are medically information intense thus medical librarians and their services are imperative.

Research Objective

The objective of the study is to examine the challenges facing the provision and utilization of fertility health information resources and services in medical libraries of teaching hospitals in South East Nigeria. The study specifically sought to:

1. determine the challenges associated with the provision of fertility health information services in these medical libraries of teaching hospitals.
2. determine the challenges facing the utilization of fertility health information services in these medical libraries of teaching hospitals.

Research Question

For the success of this study, the following research questions were the guide:

1. What are the challenges associated with the provision of fertility health information services and services in these medical libraries of teaching hospitals?
2. What are the challenges facing the utilization of fertility health information services in these medical libraries of teaching hospitals?

Research Hypothesis

In order to ascertain the significant difference between the variables, the following hypotheses were used and are tested at 0.05 level of significance:

- H_{01} : There is no significant difference between the mean rating of respondents of federal and state teaching hospital medical libraries on the challenges associated with the provision of fertility health information and services in South East Nigeria.
- H_{02} : There is no significant difference between the mean rating of respondents of federal and state teaching hospital medical libraries on the challenges facing the utilization of fertility health information and services in the medical libraries of federal and state teaching hospitals in the South East Nigeria.

Literature Review

Medical library, which is a general name for all health related libraries, is a type of special library which are established and maintained by corporate bodies such as banks, firms, hospitals, research institutes, government agencies, professional associations, private establishments, among others, to serve their research needs (Okoro, in Okeke & Ani, 2016). Cabeceiras, (1991), in Okeke, Eze, Eze & Asogwa (2017), said that the special library

could be divided into three categories or groups. These groups are – those libraries dealing with special subjects, libraries limiting their services to special group of people, and libraries whose interest are on special materials rather than general knowledge books. It entails collection of resources in different spheres, areas and horizons of life pertinent to the parent body. Medical library is in the category that deals with special subjects; meaning that it deals with special resources and services.

Medical library resources include print (book) and non-print (non-book) materials. The books (print) are dictionaries – which give the meaning of most medical terms or words; encyclopedias – which give detailed information about words, ailments and events; and the Physicians' Desk Reference (PDR) book, which is a commercially published compilation of manufacturers' prescribing guideline that is updated annually and is designed to provide physicians with full legal mandated information relevant to prescription. So also is the Index Medicus – which according to Okeke (2013), is a book that gives abbreviations of journal titles in alphabetical order of arrangement, giving a comprehensive index of medical scientific journal articles published since 1879. World Health Organization (WHO) Model Formulary – which is a list of essential medicines that serve as a guide for the development of national essential medicine lists updated and revised every two years by World Health Organization (WHO) expert committee on selection and use of medicines. Prostaglandin abstracts current therapy – a mainstay treatment given to pulmonary hypertension; a fatal disease which when left untreated progressed to death from right heart failure. This book therefore, gives current details on how to handle such cases.

Many other information resources on different ailments abound. One of the ailments is reproductive health. Most importantly, the aspect of reproductive

health called infertility also has numerous resources about it. Infertility is the inability to conceive a pregnancy or to carry a pregnancy to a life birth. It could be seen as the inability of able bodied-couple to bear children. It happens to both males and females. It is the inability to conceive after one (1) year of regular sexual intercourse. This is due to fertility problem also known as infertility. It affects many couples negatively. Infertility is said to negatively affect 8–14% of couples (Emslie, Grimshaw & Templeton, 1993; Bhatti, Fikree & Khan, 1999, in Dyer, Abrahams, Hoffman & Van Der Spuy, 2002). According to the authors above, it is a major reproductive health problem with regional prevalence rates of 30–40% in Africa. These regions, according to the writers, are West Africa and South Africa. The reason for this, according to the authors, is untreated infections, which now result in high prevalence of stigmatization, ostracism, abuse and divorce of infertile women in Africa. The authors maintained that infection is the commonest cause of infertility and that it affects the physical health of both men and women. The objective of every marriage in South east Nigeria (Igboland) is to beget children. Apparently, some couples are unable to achieve this great objective of marriage which has led to disharmony of so many marriages and even to the extent of destabilizing homes.

In Nigeria, infertility has long been a cultural concern, where it is generally held that all women should become mothers (in addition to filling other roles in the society), and infertility is seen as a serious social problem for women fulfilling in her marriage. It is seen as the woman's problem not minding that the man/husband could have infertility problems as well. This has led to several vices to the woman involved from both the in-laws' family and the society at large. For decades, infertility particularly in Southern Nigeria is seen as a careless or reckless lifestyle lived by the woman while a spinster. This assumed cause of infertility in marriage

by people holds without taking considerations that men as well can be infertile in reproduction. Women in particular, commonly suffer from severe negative social consequences such as stigmatization, ostracism, abuse and economic deprivation due to infertility. The effective management of infertility therefore has considerable impact on reproductive health in Africa. The teaching hospitals currently have remedy to this situation with the aid of their medical libraries that have the resources and services needed through the provision of health information.

The first Medical Library of a Teaching Hospital in Nigeria could be traced to the College of Medicine Library, University of Ibadan in 1948 (National Medical and Dental Council of Nigeria Regulation, 2006). South East has the second medical library in Nigeria, which is the College of Medicine Library, University of Nigeria, Enugu Campus (UNEC), Enugu, which was established in 1967. This is also a teaching hospital and the first in the South-East. This medical library serves the University of Nigeria Teaching Hospital (UNTH), Ituku/Ozalla. It is located at the old site of UNTH at the centre of Enugu which still serves as hostels to students and residents to some doctors. The library is known as Augustine Nnamani Library. Abia State University Teaching Hospital (ABSUTH) was established in 1981 as the then Imo State University Teaching Hospital before the creation of Abia state in 1991. It is located at Aba in Abia state. Imo State University Teaching Hospital (IMSUTH) was established in 2002 after series of attempts to fulfill the accreditation status of a medical school.

Ebonyi State University Teaching Hospital (EBSUTH) was established in 1991 as former ESUT faculty of health sciences library. It was established due to a response to Guinea worm epidemic (G.E. Asogwa, 2017, personal discussion with the researcher as the Ag. University Librarian ESUT). The Abakaliki specialist hospital which was created for the

treatment of the outbreak of Guinea worm was later transformed as the teaching hospital. Enugu State University of Science and Technology Teaching Hospital (ESUTH) is also a teaching hospital. It was formally established in 1996 at Nsukka campus but moved to the present library complex in the permanent site of the teaching hospital, Park lane GRA in 2005 (personal chart with Ezukwuoke, N.E. September 24th, 2018). It was established also to serve the information needs cum research of both staff, students, medics and paramedics of both the institution as well as visitors from other institutions. Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi was established in 1992 following the upgrading of ASUTECH campus for pre-science students at Okofia into a full-fledged medical college (Nwosu, 2019). It is located within the teaching hospital premises along Onitsha Road, Nnewi north local government Area of Anambra state. The library serves both the college of health sciences and the teaching hospital. Chukwuemeka Odumegwu Ojukwu University Teaching Hospital medical library is located at Amaku, Awka in Anambra State. This library serves the college of health sciences and the teaching hospitals staff.

This research therefore sought to establish the challenges facing the provision and utilization of reproductive information resources and services, particularly the aspect of infertility eradication. This is considering the fact that teaching hospitals are on the lead, the library therefore should be explored so as to know the extent at which they provide resources as well as render services towards combating infertility.

Challenges associated with the provision of fertility health information resources and services.

Medical libraries like every other organization do have challenges facing them. In essence, there are challenges facing librarians in providing the resources and services needed in the library. These barriers or challenges

could either be man-made or natural. Okeke (2013) stated that the problems of medical libraries in providing resources and services are not far from poor funding, non-conducive environment, inadequate professional librarians cum staff (personnel), lack of current materials and services, inadequate power supply, lack of guide on use of library materials, etc. This is a true assertion because funding seems to be the major problem of almost every organization in Nigeria. This is because it hinders the acquisition cum maintenance of the resources available as stated by Oguonu, (2012). All the same, lack of funds cum emoluments to the librarians will hinder them from giving quality services to their clients. It will also lead to poor subscription to medical journals, which the clientele need most. Aside this, there is the power failure factor generally faced in Nigeria. This has led so many organizations into penury because they run generator using funds meant for other things to fuel or buy diesel for these generators to supply light. Not only that, if there is power failure, most activities of these medical libraries will be halted thereby making librarians as well as users dormant for the day. On the other hand, Amusa, Alawiye and Duro (2017) listed some challenges facing libraries as lack of current contents due to poor subscriptions, low-level of local contents, paucity of time to search the resources, inadequate search skills, electricity and internet issues and poor ICT skills.

In essence, lack of professionals or qualified personnel poses a great challenge to medical libraries if not properly handled (Amusa, Alawiye and Duro; 2017). The medical librarians are the trained professionals who help clinicians in combating and eradicating diseases and ailments of which infertility is one of them, it therefore requires a professional to help provide, acquire, organize and disseminate the information resources and thus applying the required services so as to satisfy their users. This is a

new phenomenon on health but it needs professional touch in its information resources and services handling thereby supporting clinicians to achieve positive results.

Challenges associated with the utilization of fertility health information resources and services

There are challenges facing users in utilizing the fertility health information resources and services in the teaching hospital medical libraries under study. Assuming a medical library that has so many users was asked to close down their services to the users due to poor information and communication technology skills of the personnel that medical school will automatically shut down as well. This is because one of the major reasons for accrediting medical schools and their medical courses is the existence of a good and functional library as stated by Okeke, Eze, Eze and Asogwa (2017). On the other hand, Ibegbulem, Ejikeme and Nosike (2017) maintained that, lack of access to information resources and services; lack of education/training in skills in using medical databases; lack of awareness on the available e-resources in the library; lack of knowledge of the information needed and as well; lack of information seeking behavior; are some of the problems associated with the utilization of information resources and services in medical libraries. The authors maintained that if the users of the medical libraries are able to identify the information they need, it will not pose a problem at all to both the users and the librarians. Okeke (2013) maintains that challenges facing the utilization of information resources and services in medical libraries include un-conducive environment, inadequate reading capacity, poor ventilation of most medical libraries, lack of trained librarians to assist users, obsolete materials, among others.

Methodology

Descriptive survey design was used for the study. The area of this study is South-East zone of Nigeria which comprised of five (5) states namely: Abia, Anambra, Ebonyi, Enugu and Imo. The South East zone of Nigeria is located at the Southern part of Nigeria. The zone is bound geographically by Kogi/Benue states in the North. Delta/Edo states by the West. Rivers/Bayelsa states by the south and Akwa-Ibom/Cross River states by the east. Each of these states has a teaching hospital them as follows: Abia: Abia State University Teaching Hospital (ABSUTH). Anambra: Chukwuemeka Odumegwu Ojukwu University Teaching Hospital (COOUTH) and Nnamdi Azikiwe University Teaching Hospital (NAUTH). Ebonyi State has Ebonyi State University Teaching Hospital (EBSUTH) and Alex Ekwueme Federal University Teaching Hospital (FETHA). Enugu has University of Nigeria Teaching Hospital (UNTH) and Enugu State University Teaching Hospital (ESUTH). Imo State has Imo State University Teaching Hospital (IMSUTH). The population of this study comprised 4,469 registered users and librarians of the medical libraries in South East Nigeria. The users of these medical libraries are 4425, while that of librarians is 44. Stating further, federal teaching hospital medical libraries have 15 medical librarians and 1749 users, while the state owned teaching hospital medical libraries have 29 medical librarians and 2676 users. The sample size for the study is 929 made up of 44 librarians and 885 medical library users. Medical librarians were selected using census sampling and proportionate stratified simple random sampling for medical library users. 350 of federal university teaching hospital medical library users and 535 of state university medical library users were chosen using simple sampling from each of the institution. The questionnaire for the librarians was titled "Provision of Infertility Combating Resources and Services in Medical Libraries Questionnaire (PICRSMQLQ)". The questionnaire for users was titled "Utilization

of Infertility Combating Resources and Services in Medical Libraries Questionnaire (UICRSMQ)". Each has a 4-Likert response category. The data collected were analyzed

using Descriptive statistics of mean value whereby 2.5 was the bases of judgment. The hypotheses were tested using *t-test* at 0.05 level of significance.

Analysis

RQ 1. What are the Challenges associated with the Provision of fertility Health Resources and Services in your medical library?

Table 1: Mean responses of librarians on the challenges associated with the provision of fertility health resources and services in teaching hospital medical libraries.

S/N	Challenges associated with the provision of infertility combating information resources and services	Federal		State		Average		Decision
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	
1	Inadequate funding for the library	3.47	.83	3.80	.41	3.64	.62	SA
2	Inadequate personnel	3.07	.96	3.80	.41	3.44	.69	SA
3	Lack of staff trainings	3.80	.41	3.40	.91	3.60	.66	SA
4	Lack of staff motivation	2.67	.72	3.67	.62	3.17	.67	SA
5	Lack of ICT facilities	3.40	.91	2.00	.93	2.70	.92	SA
6	Technophobia amongst members of staff	2.40	.74	2.50	.99	2.45	.87	SD
7	Inadequate power supply	2.27	1.10	2.40	1.18	2.34	1.14	SD
8	Poor acquisition policy	2.93	.70	3.20	.86	3.07	.78	SA
9	Paucity of resources on infertility	2.80	.94	2.93	.96	2.87	.95	SA
10	High cost of infertility resources	2.80	.94	3.13	.83	2.97	.89	SA
11	Lack of interlibrary cooperation	2.40	1.18	3.27	.96	2.84	1.07	SA
12	Lack of training and retraining on assisted reproductive technology (ART)	3.07	.80	3.20	.78	3.14	.79	SA
Cluster Mean		2.92	.85	3.11	.82	3.02	.84	SA

Key: $\bar{x}$ – Mean; SD – Standard Deviation; SA – Strongly Agree; SD – Strongly Disagree.

The Table 1 above gave an interpretation of the mean responses of respondents of both federal and state teaching hospital medical librarians on the challenges facing the provision of fertility health information resources and services in their libraries. It clearly revealed that all the items listed as challenges were accepted except technophobia among members of staff and

inadequate power supply (i.e. items 190 and 191). Their mean responses are below 2.5 which is the judgement base and therefore, rejected and strongly disagreed that these are never a problem to the librarians. Generally, all the challenges listed were accepted by the respondents since their grand mean exceeds the judgment base mean of 2.5.

Table 2: T-test analysis of federal and state teaching hospital medical librarians on the challenges associated with the provision of fertility health information resources and services in south east Nigeria.

Status	N	Mean	SD	Df	t-value	t-cal	Decision
Federal	15	35.08	10.23	28	2.05	0.61	Accept Ho
State	15	37.30	9.84				

Result in Table 2 above shows the t-test for independent samples assuming equal variance on the challenges facing the provision of fertility health information resources and services in federal and state teaching hospital medical libraries by their librarians. Since the t-value is greater than

the t-cal, the researcher therefore accepts the null hypothesis and states that there is no significant difference on the mean responses of the federal and state teaching hospital medical librarians in the teaching hospital medical libraries in South East Zone of Nigeria, on the challenges facing the

provision of fertility health information resources and services

RQ 2. What are the Challenges Facing the Utilization of Fertility Health Information Resources and Services in your medical library?

Table 3: Mean responses of users on the challenges facing the utilization of fertility health information resources and services in teaching hospital medical libraries.

S/N	Challenges facing the provision of infertility combating information resources and services	Federal		State		Average		Decision
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	
1	Lack of adequate resources	1.83	.89	2.67	1.10	2.25	1.00	SD
2	Unqualified personnel	1.80	.83	2.50	1.13	2.15	.98	SD
3	Poor services of the personnel	1.98	.81	2.72	1.21	2.35	1.01	SD
4	Noisy environment	1.54	.77	2.75	1.10	2.15	.94	SD
5	Library not spacious	1.58	.95	2.64	1.19	2.11	1.07	SD
6	Lack of alternate power supply	1.89	1.08	2.50	1.20	2.20	1.14	SD
7	Lack of up-to-date subscriptions of on-line journals	2.24	.78	3.17	1.02	2.71	.90	SA
Cluster Mean		1.84	.87	2.71	1.14	2.28	1.01	SD

Key: $\bar{X}$ – Mean; SD – Standard Deviation; SA Strongly Agree; SD – Strongly Disagree

Data from the responses of federal and state teaching hospital medical libraries users on the challenges facing the provision of fertility health information resources and services in their libraries

Table 3 above shows the mean responses on the challenges facing the utilization of fertility health information resources and services in the teaching hospital medical libraries in south east zone of Nigeria. The federal teaching hospital medical library

users strongly disagree with the researchers' option as problems indicating that the items are not seen as challenges at all. In the same vain, their counter parts in state teaching hospital agreed with all the options showing that the items are challenges facing them. Generally, both the federal and state teaching hospital medical library users disagreed with the items posed as challenges since their grand mean is less than 2.50, the judgment base.

Table 4: T-test analysis of federal and state teaching hospital medical library users on the challenges facing the utilization of infertility combating information resources and services in south east Nigeria.

Status	N	Mean	SD	Df	t-value	t-cal	Decision
Federal	288	12.86	6.11	586	1.98	10.50	Reject Ho
State	300	18.95	7.95				

Result in Table 4 above shows the t-test for independent samples assuming equal variance on the challenges facing the utilization of infertility combating information resources and services in teaching hospital medical library users. The t-cal (10.50) is greater than the t-value (1.98) and therefore the researcher rejects the null hypothesis and state that there is a significant difference between the mean ratings of the federal and state teaching hospital medical library users on the challenges they face while utilizing the

infertility combating information resources and services in their libraries.

Discussion of Findings

On the challenges facing the provision of fertility health information resources and services in the teaching hospital medical librarians, the federal teaching hospital medical librarians accepted that inadequate funding for the library, inadequate personnel, lack of staff training, among others are challenges they face. However, they strongly disagreed that technophobia amongst members of staff and inadequate

power supply are not problems at all. Their counter parts in the state teaching hospital medical library, said that all except lack of information and communication facilities and inadequate power supply were their challenges. One can deduce the fact that the managements now spend a lot in getting the required ICT facilities needed in the libraries and as well train staff from time to time on ICT usage.

This is good particularly to teaching hospital libraries, as the ICT, according to Oluwatobi, Ehioghae, Aluko-Arowolo and Olusegun (2014), posited that Library resources/facilities when adequately provided and utilized would produce great critical thinkers and well taught professionals. This assertion is very true because when the adequate resources and services are provided and used, there would not be challenges to disturb the peace of the learning community. The findings also corroborates Mohammed and Abule (2014) who maintained that to avoid challenges which hinder the provision of fertility health information resources and services, there is the need for an effective and virile library services at the medical libraries, that it could be achieved by adequately funding the library for human and material resources development, that there is the need for an Information and Communication Technology (ICTs) centre which can provide an effective internet and other ICT facilities at the library, that there is the need for training and retraining opportunities for information service providers at the medical library, and lastly, there should be alternative power supply which will always be ensured at the medical library. The researchers no doubt, believe that when all these are put in place particularly the funding, which is the bone of contention in every library, should be taken care of.

On the challenges facing the utilization of infertility combating information resources and services in the teaching hospital medical

libraries, the federal teaching hospital users believe that they have no challenges facing their utilization of infertility combating information resources and services. Meanwhile, their counter parts in the state teaching hospital medical library strongly agreed that all the listed options are challenges to them. This is because their mean scores are up to the judgement base of 2.5 and above. Nevertheless, the general mean score for this is below 2.5 meaning that they strongly disagreed to having any challenges. In lieu of this, Ubogu (2000) in Oluwatobi, Ehioghae, Aluko-Arowolo and Olusegun(2014) maintained that, the library users are expected to adequately make use of the available library resources and services by being able to locate the resources they want both in physical and in digital forms, access them physically and electronically, and as well, begin to demand a one-stop shopping in an integrated information environment. There is nothing wrong in creating a good atmosphere for both users and librarians as this will help both achieve the goals of establishing the library as stated in Ranganathans' 5 laws of librarianship which states that: 1 – books are for use, 2- every book its reader, 3 – every reader his book, 4 – save the time of the reader as well as that of the librarian, and 5 – the library is a growing organism. By so doing, an enabling environment will be created for both librarians and users of the library as well as their library resources and services.

Conclusion

There are challenges facing both the provision and the utilization of reproductive information resources and services in the teaching hospital medical libraries that were studied. Such challenges cut across inadequate funding for the library, inadequate personnel, lack of staff motivation, among others. For utilization, most staff have no library background hence cannot be able to satisfy their users by giving

them the adequate information resources and services that they need.

Recommendation

In order to address the challenges facing the provision and utilization of infertility combating information resources and services, the authors recommend that:

1. Adequate funding should be made to these teaching hospital medical libraries by their various authorities/managements to enable the librarians do the proper acquisition, processing and accessibility of required information resources and services needed in their libraries. Also, medical librarians in these teaching hospital libraries should from time to time be sent/sponsored on trainings, conferences and workshops by their employers thereby motivating them and giving them an enabling environment to give their information delivery without hitches. Never-the-less, attitudes of some of the medical librarians should be checked. This pertains to the federal teaching hospital medical librarians. Let it not go by the saying that "the peoples' goat always dies of hunger". Since it is the federal government that owns them, anything can go. Most of them do other businesses in their places of work thereby interfering with the health information services they should be given to their clients. The implication here is that, there would not be the moral for the users to visit the library even when they need important health information resources and or even services, they may resort to using the online services of google to help themselves no matter the cost and the time involved. More so, employment of librarians should be based on merit and good qualifications for the post so that their information services should be adequately carried out without confusing their users with "I do not know syndrome".

2. There should be a conducive environment with adequate and qualified personnel with continuous training and retraining of the medical librarians from time to time particularly on current health issues. These will give them the opportunity to market to their library users on utilization of health information resources and services such as infertility among others.

References

- Amusa, O.I., Alawiye, M.K. & Duro, J.M. (2017). Information format preference and challenges of electronic information resources usage among management sciences lecturers in public universities in South-West Nigeria. *Nigerian Library Link*, 16 (1&2), 1-13.
- Annune, A.E. (2017). *Documentation, dissemination and utilization of information on indigenous medicinal knowledge of improved health among the Tiv rural communities of Benue State*. Unpublished PhD Dissertation, Department of Library and Information Science, University of Nigeria, Nsukka.
- Asogwa, G.E. (2017). Personal discussion on the History development of ESUT and the Main Library as the Ag. University Librarian of ESUT.
- Azonwu, G. & Nduka, C.T. (2021). Technology Alternatives to Challenging Infertility Issues in Sub-Saharan Africa. *International Journal of Research and Reports in Gynecology*, 1-9.
- Barreau, D., Bouton, C., Renard, V. & Fournier, J.P. (2018). Health sciences libraries' subscriptions to journals: Expectations of general practice departments and collection-based analysis. *Journal of the Medical Library Association*, 106 (2), 235-243. DOI: dx.doi.org/10.5195/jmla.2018.282.
- Dyer, S.J., Abrahams, N., Hoffman, M. & Van Der Spuy, M., (2002). Infertility in South Africa: Women's reproductive health knowledge and treatment-seeking behavior for involuntary childlessness. *Human Reproduction*, 17(6), 1657-1662. Retrieved from <http://www.infertilityRSA.com>.

- Ebong, M.D. (2012). *Medical library users' preferences and competencies in the use of electronic information resources in the South-South Nigerian Universities*. Unpublished Master's Thesis, Department of library and information science, University of Nigeria, Nsukka.
- Ezukwuoke, N.E. (2018). Personal chart on the establishment of ESUTCOM, Parklane, September 24th.
- Ezukwuoke, N.E. & Okereke, C.A. (2016). The role of medical libraries and librarians in contemporary medical education and research in Nigeria. *Nigerian Library Link – A Journal of Library and Information Science*, 15(1&2), 48-55.
- Fladger, A., Bandy, M., Doyle, J.C., Girouard, L., Harvey, S., Hayes, S., Rourke, D. & Stermer-Frumment, K. (2007). Standards for hospital libraries 2007. *Hospital Libraries Section Standards Committee*. Retrieved online at <http://www.hospitalslibrarystandard.com>.
- Ibegbulam, I.J., Ejikeme, A. & Nosike, O.K. (2017). Information seeking behavior of nurses in university of Nigeria, Nsukka medical centre. *Nigerian library Link*, 16(1&2), 35-48.
- Mohammed, B.B. & Abule, M.A. (2014). An examination of health information service provision at federal medical center, Katsina. *Journal of Qualitative and Quantitative Methods in Libraries (QQML)*, 2, 503–508.
- Mwatela, W.M. (2013). *Factors influencing utilization of library services and resources: The case of University of Nairobi Mombasa campus library*. Masters' Thesis, Project Planning and Management, University of Nairobi.
- Ogbodo, C.N. (2019). *Perception of healthcare professionals on provision and utilization of infertility combating services in teaching hospitals in Enugu State*. Doctoral Dissertation, Department of Health and Physical Education, Enugu State University of Science and Technology, Enugu.
- Oguonu, O.C. (2012). *Assessment of reference and information services in state teaching hospital medical libraries in South East Nigeria*. Master's Thesis, Department of Library and Information Science, University of Nigeria, Nsukka.
- Okeke, O.C., Eze, J.U. & Ani, T.C. (2019). Utilization of medical library and information resources and services towards promoting "Health for all" initiative in South-East Nigeria: The case of Enugu State. *Journal of Applied Information Science and Technology*, 12(1), 89 – 100.
- Okeke, O.C., Eze, S.G.N., Eze, J.U. & Asogwa, G.E. (2017). Status of medical library resources and services in teaching hospitals in Enugu state, Nigeria: Implications of quality health care services. *International Journal of Knowledge Content Development & Technology*, 7(2), 21-40. Available at <http://dx.doi.org/10.5865/IJKCT.2017.7.2.021>.
- Okeke, O.C. & Ani, T.C.E. (2016). The school library as an academic enhancer to users towards achieving the objectives of the National Policy on education. *Nigerian Library Link*, 15(1&2), 56-69.
- Okeke, O.C. (2013). Utilization of information resources and services in medical libraries in Enugu State. Master's Thesis, Department of Library and Information Science, University of Nigeria, Nsukka.
- Oluwatobi, O., Ehioghae, M., Aluko-Arowolo T.K. & Olusegun, O.A. (2014). *Utilization of library resources for effective research output among post graduate ministerial students of Adventist University Africa in Babcock University*. Available at: <http://creativecommons.org/licenses/by-nc/3.0>.
- Ranganathan, S.R. (1931). *The five laws of library science*. India: Madras Library Association Edward Goldston.
- Van, D.H., (2010). Clinical and immunologic aspects of egg donation pregnancies: A systematic review. *Human Reproduction*, 16(6), 704 -712. Retrieved from <file:///C:/Users/user/Documents/Infertility/Infertility%20Services.pdf>.
- World Health Organization (WHO). (2013). *WHO International*. Retrieved from http://encyclopedia.wikipedia.org/wiki/surrogate_pregnancy.

World Health Organization. (2015). Education and treatment in human sexuality: The training of health professionals. *WHO technical report series*, 572. Geneva: WHO.

World Health Organization. (2011). *The reproductive health of adolescents: A strategy of action*. Geneva: WHO.

WHO (2017). Reproductive Health. WHO Pacific Regional Office. Available at http://www.wpro.who.int/topics/reproductive_health/en/2017.